

Docket No.: 4590-535

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	:	EXPEDITED PROCEDURE
	:	Response under 37 CFR 1.116
Arnaud BAILLEUL et al.	:	Confirmation No. 1292
	:	
U.S. Patent Application No. 10/583,137	:	Group Art Unit: 2192
	:	
Filed: June 16, 2006	:	Examiner: Cheneca Smith
For: METHOD FOR VERIFYING RULES ON UML MODELS		

**AMENDMENT UNDER RULE 116**

Mail Stop AF  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450

Sir:

This paper is submitted in reply to the Office Action mailed December 3, 2010, which was made Final. Applicants respectfully request that the following amendments **as to form** be entered to place this application in condition for allowance.

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks/Arguments** begin on page 4 of this paper.

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for verifying rules on UML models, comprising:
  - establishing a model;
  - writing verification rules for a tool for model manipulation;
  - structuring data of the model so as to render the data utilizable by the tool for model manipulation;
  - producing using the tool for model manipulation a verification file based on the data and the verification rules; and
  - producing a verification report readable by a user on the basis of the verification ~~file~~file, wherein the verification rules comprise verification rules relating to calculation of progress metrics for the model.
2. (Currently Amended) The method as claimed in claim 1, wherein the verification rules ~~are one further comprise~~ at least of verification rules relating:
  - to a code generator,
  - to a consistency of the model,
  - to the consistency of code,
  - to correct modeling,
  - to dimensioning measurements, or
  - ~~to modeling progress measurements,~~
  - to a quality of the model.
3. (Previously Presented) The method as claimed in claim 1, wherein a file of the model, established in the UML format, is exported in the XMI format to the tool for model manipulation.

4. (Previously Presented) The method as claimed in claim 1, wherein the verification file produced by the tool for model manipulation is in the XML format.

5. (Previously Presented) The method as claimed in claim 4, wherein the verification file in the XML format produced by the tool for model manipulation is converted into the XSLT format so as to be transformed into a document file of another appropriate format.

6. (Previously Presented) The method as claimed in claim 2, wherein a file of the model, established in the UML format, is exported in the XMI format to the tool for model manipulation.

7. (Previously Presented) The method as claimed in claim 2, wherein the verification file produced by the tool for model manipulation is in the XML format.

8. (Previously Presented) The method as claimed in claim 3, wherein the verification file produced by the tool for model manipulation is in the XML format.

**REMARKS**

Claims 1-8 are pending in this application. By this Amendment, claims 1 and 2 are amended. Claim 1 is amended to incorporate features recited in claim 2, and for clarity. Claim 2 is amended to remove the features now recited in claim 1. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

Entry of the amendments is proper under 37 CFR §1.116 because the amendments: (a) place the application in condition for allowance for the reasons discussed herein; and (b) do not raise any new issue requiring further search and/or consideration as the amendments do not add any new features to the claims. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

**Rejection under 35 U.S.C. §102**

Claims 1 and 2 were rejected in the Office Action under 35 U.S.C. §102(b) as being anticipated by Rule-Based Detection of Inconsistency in UML Models by Lui. This rejection is respectfully traversed.

Claim 1 recites, among other features, the verification rules comprise verification rules relating to calculation of progress metrics for the model. Lui teaches at, e.g., section 3.1 Inconsistency Identification Using Production System, we describe four types of rules that are defined to ensure the validity of inconsistency status:

- inconsistency rules that identify inconsistencies of designs;
- resolution rules that respond to user's choice of fixing;
- cleanup rules that remove expired inconsistency working memory elements and the corresponding workspace items;
- orphan control rules that remove the working memory elements whose parent WME either is invalid or has been deleted.

Lui does not teach rules relating to calculation of progress metrics for the model.

For at least the foregoing reasons, Lui cannot reasonably be considered to teach the combination of all of the features positively recited in claim 1. Further, Lui cannot reasonably be considered to teach, the combination of all of the features recited in claim 2 for at least the dependence of this claim on an allowable base claim, as well as for the separately patentable subject matter that this claim recites.

Accordingly, reconsideration and withdrawal of the rejection of claims 1 and 2 under 35 U.S.C. §102(b) as being anticipated by Lui are respectfully requested.

### **Rejections under 35 U.S.C. §103**

Claims 3 and 6 were rejected in the Office Action under 35 U.S.C. §103(a) as being unpatentable over Lui in view of Generic XMI-Based UML Model Transformations by Kovse et al. (hereinafter "Kovse"). This rejection is respectfully traversed.

In the Office Action it is conceded that Lui does not teach a file of the model, established in the UML format, is exported in the XMI format to the MIA tool. In the Office Action it is asserted that Kovse remedies these shortfalls of Lui. As argued above, Lui cannot reasonably be considered to have suggested the combination of all of the features recited in claim 1. Kovse, as applied to claim 1, does not remedy the above-discussed shortfalls of Lui. Therefore, the combination of Lui with Kovse cannot reasonably be considered to have suggested the combinations of all of the features recited in claims 3 and 6 for at least the dependence of these claims on allowable base claims, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejection of claims 3 and 6 under 35 U.S.C. 103(a) as being unpatentable over Lui in view of Kovse are respectfully requested.

Claims 4, 5 and 7 were rejected in Office Action under 35 U.S.C. §103(a) as being unpatentable over Lui in view of U.S. Patent No. 7,480,893 to Berenbach et al. (hereinafter "Berenbach"). This rejection is respectfully traversed.

In the Office Action it is conceded that Lui does not teach the report file produced by the MIA tool is in the XML format. In the Office Action it is asserted that Berenbach

remedies these shortfalls of Lui. As argued above, Lui cannot reasonably be considered to have suggested the combination of all of the features recited in claim 1. Berenbach, as applied to claim 1, does not remedy the above-discussed shortfalls of Lui. Therefore, the combination of Lui with Berenbach cannot reasonably be considered to have suggested the combinations of all of the features recited in claims 4, 5 and 7 for at least the dependence of these claims on an allowable base claim, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejection of claims 4, 5 and 7 under 35 U.S.C. 103(a) as being unpatentable over Lui in view of Berenbach are respectfully requested.

Claim 8 was rejected in the Office Action under 35 U.S.C. §103(a) as being unpatentable over Lui in view of Kovse and further in view of Berenbach. This rejection is respectfully traversed.

In the Office Action it is conceded that Lui and Kovse do not teach the verification file in the XML format produced by the tool for model manipulation is converted into the XSLT format so as to be transformed into a document file of another appropriate format. Applicants note that claim 8 does not recite the above features. In the Office Action it is asserted that Berenbach remedies these shortfalls of Lui and Kovse. As argued above, Lui and Kovse cannot reasonably be considered to have suggested the combination of all of the features recited in claim 1. Berenbach, as applied to claim 1, do not remedy the above-discussed shortfalls of Lui. Therefore, the combination of Lui with Kovse and Berenbach cannot reasonably be considered to have suggested the combination of all of the features recited in claim 8 for at least the dependence of this claim on allowable base claims, as well as for the separately patentable subject matter that this claim recites.

Accordingly, reconsideration and withdrawal of the rejection of claim 8 under 35 U.S.C. 103(a) as being unpatentable over Lui in view of Kovse and further in view of Berenbach are respectfully requested.

**Conclusion**

All objections and rejections having been addressed, it is respectfully submitted that the application is in condition for allowance and a Notice to that effect is earnestly solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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